

### **REMARKS**

The Official Action mailed February 17, 2010, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on May 12, 2006, and February 2, 2010.

**SECOND REQUEST:** However, the Applicant has not received acknowledgment of the Information Disclosure Statement filed on July 1, 2009. The Applicant respectfully requests that the Examiner provide an initialed copy of the Form PTO-1449 evidencing consideration of the above-referenced Information Disclosure Statement.

Claims 1-16 were pending in the present application prior to the above amendment. Independent claims 1-3 and 9-11 have been amended to better recite the features of the present invention, and new dependent claims 17-22 have been added to recite additional protection to which the Applicant is entitled. Accordingly, claims 1-22 are now pending in the present application, of which claims 1-3 and 9-11 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 2 of the Official Action rejects claims 1-5 and 7-16 as obvious based on the combination of U.S. Patent No. 6,246,524 to Tanaka or U.S. Patent No. 6,291,320 to Yamazaki, JP 2003-287704 to Okamoto and U.S. Patent No. 7,088,761 to Iehisa or U.S. Patent No. 6,282,227 to Schmitt. Paragraph 3 of the Official Action rejects claim 6 as obvious based on the combination of Tanaka '524 or Yamazaki, Okamoto, Iehisa or Schmitt and U.S. Patent No. 6,545,248 to Tanaka. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2144.04, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either

in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 1-3 and 9-11 have been amended to recite a crystal of ceramic doped with Yb, which is similar to a feature recited in part of claims 5 and 13, and which is supported in the present specification, for example, by paragraphs [0026], [0085], [0095], [0096], [0124], [0255] of the pre-grant publication of the present application, i.e. U.S. Publication No. 2007/0063226. For the reasons provided below, Tanaka '524 or Yamazaki, Okamoto, Iehisa or Schmitt and Tanaka '248, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

The Official Action relies on Iehisa and Schmidt to allegedly "show that it is known in the art that the solid-state laser such as Nd:YAG laser includes a ceramic crystal" (page 3, Paper No. 20100211). However, Iehisa, for example, merely teaches that "the laser active medium is a single solid-state crystal such as Yb:YAG or Nd:YVO<sub>4</sub>, a combination of the solid-state crystals, or a ceramic crystal" (see column 6, lines 40-

45). However, the Applicant respectfully submits that lehisa or Schmidt does not teach or suggest a crystal of ceramic doped with Yb.

Therefore, the Applicant respectfully submits that Tanaka '524 or Yamazaki, Okamoto, lehisa or Schmitt and Tanaka '248, either alone or in combination, do not teach or suggest a crystal of ceramic doped with Yb.


Since Tanaka '524 or Yamazaki, Okamoto, lehisa or Schmitt and Tanaka '248 do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

New dependent claims 17-22 have been added to recite additional protection to which the Applicant is entitled. The features of claims 17-22 are supported in the present specification, for example, by paragraphs [0071], [0085], [0095], [0096], [0124] and [0254]. The Applicant respectfully submits that new claims 17-22 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Respectfully submitted,

  
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